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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,722	10/13/2003	Steven M. Benedetti	0275M-000750	4344
27572	7590	05/22/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			MILLS, DANIEL J	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/684,722	<b>Applicant(s)</b> BENEDETTI ET AL.	
	<b>Examiner</b> Daniel J. Mills	<b>Art Unit</b> 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/18/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, and 4-34 is/are pending in the application.
- 4a) Of the above claim(s) 29-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-28 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

This office action replaces the action mailed 1/3/2006. The rejection of claims 1, 4-28, and 34 under 35 U.S.C. 112 first paragraph has been withdrawn. Upon review, the subject matter of these claims complies with the written description requirement of 35 U.S.C. 112 first paragraph.

#### ***Election/Restrictions***

Claims 29-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/16/2006.

#### **Product by Process**

Claims 1, 12, and 18 are product by process claims, determination of patentability in "product by process" claims is based on product itself, even though such claims are limited and defined by process, and thus product in such claim is unpatentable if it is same as, or obvious from, product of prior art, even if prior product was made by different process.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 12, the limitation "the first and second portions when molded together" (line 13) renders the claim indefinite as it is not clear whether applicant is attempting to claim first and second portions which are molded together or simply capable of being molded together. Therefore the metes and bounds of this claim are unclear.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-8, 10-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gronau et al. (Gronau - US 5,542,158) in view of Smith et al. (Smith – US 6,381,811). Please note the marked-up attachment.

Regarding claim 1, Gronau discloses a fastener comprising a polymeric first portion (14) having a flexible skirt (18) and at least two support posts (D) distally extending from a first side of the flexible skirt, and a metal second portion (20) connected to (when assembled as in Figure 3) the first portion, the second portion having a plate portion (24) defining a plane and at least two deflection wings (A)

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extending from the plate portion on the first side of the flexible skirt and oppositely extending about the plane, and at least one substantially U-shaped member (24) freely extending from a second side of the flexible skirt. Gronau fails to disclose that the first and second portions are bonded, and the first and second portions which together define a unitary insert molded fastener having the first portion integrally joined to the second portion.

Smith teaches a first (28) and a second portion (12) which together define a unitary insert molded fastener having the first portion integrally and inseparably joined to the second portion. Smith teaches this is useful to produce a panel connector which hermetically seals one side of the panel from the other in the vicinity of the connector. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the arrangement of Gronau to include a first and a second portion which together define a unitary insert molded fastener having the first portion integrally and inseparably joined to the second portion to produce a panel connector which hermetically seals one side of the panel from the other in the vicinity of the connector as taught by Smith.

Regarding claim 4, Gronau in view of Smith results in a fastener wherein each deflection wing (A) comprises a fixed end (E) integrally joined to a distal end (C) of the second portion, and a displaceable end (B), wherein the displaceable end of a first one of the deflection wings is spatially separable (as can be seen, both ends - B are separable) from the displaceable end of a second one of the deflection wings.

Regarding claim 5, Gronau in view of Smith results in a fastener wherein each deflection wing comprises, a first bend (E) adjacent the distal end of the second portion, a deflection wing body (F) angularly directable by the first bend away from a plane (defined by 10) formed in parallel with the distal end of the second portion, and a second bend (G) located at a junction between the deflection wing body and the displaceable end, the second bend angularly directing the displaceable end toward the support posts (in as much as the second bend of applicant's invention does).

Regarding claim 6, Gronau in view of Smith results in a fastener comprising the first one of the deflection wings (A1) being positionable on a first side of the plane formed in parallel with the distal end of the second portion, and the second one (A2) of the deflection wings being positionable on a second side of the plane (defined by 10) formed in parallel with the distal end of the second portion (as can be seen in figure 3, the first wing is positionable only on the first side of 10 while the second wing has an extension - connecting the 24 with the wing, that is positionable above the second side of the plane 10).

Regarding claim 7, Gronau in view of Smith results in a fastener, comprising a plate portion (C is a curved plate) adjacent the distal end of the second portion, the plate portion operable to integrally support the fixed end of each deflection wing.

Regarding claim 8, Gronau in view of Smith results in a fastener comprising a bridge (H) transversely joining a distal end of each of the support posts, the bridge being insert moldable with the plate portion.

Regarding claim 10, Gronau in view of Smith results in a fastener with two support posts (D) distally extending from a first side of the flexible skirt with the second portion insert moldable. Gronau fails to disclose that these support posts have a beveled end.

Smith teaches the use of support posts with beveled ends for the purpose of easier insertion of the clip into a panel. Accordingly, it would have been obvious to one of ordinary skill in the panel clip art at the time of applicant's invention to modify the arrangement of Gronau to include support posts with beveled ends as taught by Smith for the purpose of easier insertion of the clip into a panel.

Regarding claim 11, Gronau in view of Smith results in a fastener wherein each U-shaped member (24) comprises at least one toothed retention element (28).

Regarding claim 12, Gronau in view of Smith results in a one-piece apparatus for joining accessories to vehicles, the apparatus comprising a polymeric first portion (14) including a flexible skirt (18), a pair of support posts (D) extending substantially perpendicularly from a side of the skirt, each of the support posts including a flange (the inside face of 18), and a bridge (H) co-moldable with and integrally joining distal ends of each of the support posts and a metallic second portion (20) including an end portion (22) having an edge inserted partially into the flange of each of the support posts to a depth selectable to operably bond the second portion within the flange of the support posts (the metallic portion mechanically deforms the inside surface of D, and is operably bonded to the posts), the end portion having a pair of integrally connected metallic deflectable wings (A), the deflectable wings extendable toward the flexible skirt, the first

and second portions when molded together defining a unitary insert molded fastener having the first portion inseparable from the second portion (as in Figure 3).

Regarding claim 13, Gronau in view of Smith results in an apparatus wherein the second portion comprises a head (J) having at least one engagement member (24).

Regarding claim 14, Gronau in view of Smith results in an apparatus wherein the second portion (20) comprises a central portion (22) insert moldable with the support posts, the central portion integrally joined to the head (J) and extending from the head through the flexible skirt.

Regarding claim 15, Gronau in view of Smith results in an apparatus wherein each engagement member (24) comprises a substantially U-shaped clip having an open end facing away from the flexible skirt, and a bight (26) formed between a junction of an opposed pair of clip bends, the bight including at least one barb.

Regarding claim 16, Gronau in view of Smith results in an apparatus wherein the polymeric first portion comprises a polyamide material (column 2 line 45)

Regarding claim 17, Gronau in view of Smith results in the apparatus, as previously noted above, but fails to disclose that the metallic second portion comprises a stainless steel.

However, it would have been an obvious matter of engineering design choice at the time of applicant's invention, to modify Gronau to include stainless steel because of the well known property of corrosion resistance.

Regarding claim 18, Gronau in view of Smith results in a fastener system comprising a vehicle body panel (10), a one piece fastener (when assembled) having a



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metallic portion (20) insert moldable with a polymeric moldable portion (14), the metallic portion integrally bonded to the polymeric molded portion (the two are mechanically connected to one another) at least one U-shaped member (24) of the metallic portion operably receiving a fixed rib (30) connectably joined to a trim piece (32), and a pair of support posts (D) insert moldable with the moldable portion and operably engageable within a substantially rectangular aperture of the body panel (10), and an edge of the metallic portion inserted partially into and integrally attached to each of the pair of support posts (the metallic portion mechanically deforms the inside surface of D, and is integrally attached to the posts) wherein the deflectable wings operably deflect toward each other upon penetration of the support posts within the aperture and expand away from each other by spring force to releasably engage the fastener with the body panel.

Regarding claim 19, Gronau in view of Smith results in an apparatus wherein the at least one U-shaped member (24) comprises a pair of U-shaped members (24), each having a bight (26) section to releasably engage the trim piece.

Regarding claim 20, Gronau in view of Smith results in an apparatus wherein the bight (26) section includes at least one barb (28).

Regarding claim 21, Gronau in view of Smith results in an apparatus comprising a central barb (K) formed between the two members (K appears in figure 1 at least partly between the two U-shaped members).

Regarding claim 22, Gronau in view of Smith results in a fastener system with two support posts (D) distally extending from a first side of the flexible skirt with the

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second portion insert moldable. Gronau in view of Smith fails to result in that these support posts have a beveled end.

Smith teaches the use of support posts with beveled ends for the purpose of easier insertion of the clip into a panel. Accordingly, it would have been obvious to one of ordinary skill in the panel clip art at the time of applicant's invention to modify the arrangement of Gronau to include support posts with beveled ends as taught by Smith for the purpose of easier insertion of the clip into a panel.

Regarding claim 23, Gronau in view of Smith results in an apparatus wherein each of the support posts (D) include a width smaller than a rectangular aperture width permitting an angular rotation of the support posts within the rectangular aperture (as can be seen, the support posts have a tapered section width smaller than the aperture).

Regarding claim 24, Gronau in view of Smith results in an apparatus wherein the moldable portion (14) includes a flexible skirt (18) operably contacting the vehicle body panel in a fully engaged position of the one piece fastener.

Regarding claim 25, Gronau in view of Smith results in an apparatus wherein the fixed rib is insert moldable with a doghouse assembly (L), the doghouse assembly being positionable between the fixed rib and the trim piece.

Regarding claim 26, Gronau in view of Smith results in the apparatus, as previously noted above, with the exception of specifying the insertion pressure at which the wings deflect.

It has generally been recognized that the optimization of a result effective variable, in this case the assembly force, in a prior art device through routine

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experimentation, is a design consideration within the level of skill in the art. In re Reese, 290 F.2d 839, 129 USPQ 402 (CCPA 1961). Therefore, it would have been no more than an obvious matter of engineering design choice to one with ordinary skill in the art at the time the invention was made to provide an assembly force of the insertion of the fastener system of Gronau to be up to 15 pounds as determined through routine experimentation and optimization, producing no new and unexpected results.

Regarding claim 27, Gronau in view of Smith results in the apparatus with the exception of specifying the fastener insertion pressure.

It has generally been recognized that the optimization of a result effective variable, in this case the assembly force, in a prior art device is a design consideration within the level of skill in the art. In re Reese, 290 F.2d 839, 129 USPQ 402 (CCPA 1961). Therefore, it would have been no more than an obvious matter of engineering design choice to one with ordinary skill in the art at the time the invention was made to provide an assembly force of the insertion of the fastener system of Gronau to be 10 pounds as determined through routine experimentation and optimization, producing no new and unexpected results.

Regarding claim 28, Gronau in view of Smith results in the apparatus with the exception of specifying the minimum fastener removal pressure.

It has generally been recognized that the optimization of a result effective variable, in this case the assembly force, in a prior art device is a design consideration within the level of skill in the art. In re Reese, 290 F.2d 839, 129 USPQ 402 (CCPA 1961). Therefore, it would have been no more than an obvious matter of engineering

design choice to one with ordinary skill in the art at the time the invention was made to provide a removal force of the fastener system of Gronau to be at least 35 pounds as determined through routine experimentation and optimization, producing no new and unexpected results.

Claims 9 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gronau (US 5,542,158) and Smith et al. (Smith - US 6,381,811) as applied to claims 1, 4-8, 10-28 above, and further in view of Okada (US 4,865,505).

Regarding claims 9 and 34, Gronau in view of Smith results in a fastener with two support posts (D) distally extending from a first side of the flexible skirt with the second portion insert moldable. Gronau fails to disclose that these support posts have a T-shaped cross section with an outer web oriented substantially perpendicular to the flange and extending outwardly relative to the second portion.

Okada teaches support posts with T-shaped cross sections (3b at the end of the engagement legs) with an outer web oriented substantially perpendicular to the flange and extending outwardly relative to the second portion for the purpose of mounting engagement legs (13) to the support posts. Accordingly it would have been obvious to one of ordinary skill in the panel clip art at the time of applicant's invention to modify the arrangement of Gronau to include a T-shaped support post cross-section with an outer web oriented substantially perpendicular to the flange and extending outwardly relative to the second portion as taught by Okada, for the purpose of mounting engagement legs to the posts.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 4-28, and 34 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues Gronau fails to disclose a plate portion defining a plane and at least two deflection wings extending from the plate portion on the first side of the flexible skirt and oppositely extending about the plane. Examiner disagrees, as it is clear that Gronau has both a plate portion (24), and two deflection wings which extend from the plate. Examiner interprets this "plane" to possibly extend beyond the bounds of the surface, and thus to roughly bisect the fastener. Clearly, the two wings extend oppositely about the plane.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Mills whose telephone number is 571-272-8115. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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U.S. Patent

Aug. 6, 1996

5,542,158

